REMARKS

Claims 24 and 36 have been amended, and claims 24-29, 31-34 and 36 are now pending. Claims 1-23, 30, 35, 37-48 have been cancelled without prejudice. The Examiner is respectfully requested to withdraw the rejections in view of the amendments.

REJECTION UNDER 35 U.S.C. § 103

Claims 20-48 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Acker (U.S. Pat. No. 5,729,129) in view of Ferre et al (U.S. Pat. No. 5,873,822). This rejection is respectfully traversed.

Claim 24 has been amended to clarify the feature of transmitting *magnetic* signals between the medical device *within* the patient's body and the reference catheter *within* the patient's body, and that at least some of the magnetic signals transmitted between the reference catheter and the medical device comprise at least two frequencies. Claim 24 has been rewritten to include features taken from dependant claims 30 and 36, which were the subject of the examiner's search. Thus, the amendment does not introduce structure or subject matter that was outside of the scope of the Examiner's search, or that requires an additional search.

The Final Office Action states on page 2 that Ferre et al. does disclose a device and a reference coil that are both placed within a body as shown in figure 32 (col. 13, lines 49-58). However, Ferre et al. disclose a fiber-optic endoscope 156, not a reference coil/catheter. The fiber-optic endoscope 156 receives light waves to provide a visual image of the device/sensor 150,152, for visually evaluating whether the device 150 has moved relative to the interior of the patient's body. Neither the device 150 nor the endoscope 156 disclosed in Ferre actually transmit magnetic signals from a location within the body.

The Final Office Action on page 3 also refers to another reference catheter 36 as being secured near the patient's surgical site. The reference unit 36 in Ferre transmits electromagnetic signals from a location outside of the patient's body, not from within the body. Ferre discloses a device 150 within the body that has a sensor 152 that receives the electromagnetic signals transmitted from a location external to the patient's body by device 36. This method of receiving electromagnetic signals transmitted from a location external to the patient's body does not allow for interference caused by moving metal objects around the patent, as does the present method. Ferre does not disclose a device within the patient's body that transmits magnetic signals that are received by another reference device within the patient's body.

In the present case, claim 24 requires the medical device within the patient's body to receive magnetic signals that are transmitted from a reference catheter within the patient's body. Unlike the present claims, Fig. 32 of Ferre shows a device 150 and an endoscope 156 having sensors 152 and 158 that receive signals from a transmitter 36 *that is external to the patient's body*. The lines projecting from the endoscope 156 in Fig. 32 merely depict the scope of imaging of the endoscope. The Final Office Action attempts to broadly interpret the fiberoptic endoscope 156 as a reference catheter that is capable of transmitting signals based on Fig. 32 in Ferre.

Even if the lines projecting from the endoscope were broadly interpreted to be a transmitted electromagnetic signal, Ferre makes no mention of the endoscope 156 having a transmitter. Ferre also makes no mention of the device 150 receiving magnetic signals transmitted from the endoscope within the patient for determining the position of the device 150 relative to the endoscope 156. Rather, Ferre specifically discloses the endoscope 156 monitors movement of the device 150 with respect to the

inside of the patient's body as shown. (Column 13 line 60). Ferre does not teach determining the position of a medical device relative to the endoscope. Thus, the only method disclosed in Ferre for determining the position of the device 150 while it is being moved within the patient's body is to rely on receiving signals that are transmitted from a location outside of the patient by transmitter 36, which transmissions are susceptible to moving metal objects around the patient. The present specification notes that when the transmitter is located in the reference catheter and the receiver is in the working catheter, both within the heart such that the separation between the transmitter and receiver is small compared to the distance between the transmitter and the metal residing outside the patient's body, the metal objects located outside of the patient body become invisible due to the sixth power reduction in the signal error. (Specification paragraph 15).

Furthermore, amended claim 24 requires at least some of the magnetic signals transmitted between the reference catheter and the medical device comprise at least two frequencies. The specification notes that two frequencies may be used to correct for the metal object affecting the signal. (Specification paragraph 15). Neither Ackers or Ferre teach or disclose a reference catheter within a patient's body having a transmitter for transmitting a magnetic signal from within a patient's body, much less transmitting magnetic signal having at least two frequencies which allow for correction of signal error due to metal objects. As such, the Applicant believes that independent claim 24 is not obvious in view of Ferre, and is in a condition for allowance.

With regard to dependant claims 25-29, 31-34 and 36, these claims depend from independent claim 24, which the Applicant believes to be allowable in view of the

above remarks. As such, the Applicant also believe that claims 25-29, 31-34 and 36 are also allowable for at least these reasons.

Claims 1--23, 30, 35, 37-48 have been cancelled without prejudice.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed for at least the reasons stated above. Applicant therefore respectfully requests that the Examiner reconsider and withdraw the presently outstanding rejections of claims 24-29, 31-34 and 36. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (314) 726-7500.

Respectfully submitted,

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